Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method of constructing a multimedia database method, comprising:

(a) receiving a start point and an end point of each first semantic unit of multimedia data, which is a smallest unit for searching for multimedia data;

(b) receiving a keyword for each first semantic unit;

(c) receiving a start point and an end point of each second semantic unit of the multimedia data including at least one first semantic unit; and

(d) storing a keyword together with location information of its corresponding first semantic unit and second semantic unit.

2. (Original) The method of claim 1 further comprising (e) receiving a start point and an end point of each third semantic unit including a predetermined number of second semantic units, wherein in (d), a keyword is stored with location information of its corresponding third semantic unit.

3. (Original) The method of claim 1 further comprising (f) receiving titles of each first semantic unit and each second semantic unit, wherein in (d), a keyword is stored with the tides of its corresponding first semantic unit and second semantic unit.

4.   (Original) The method of claim 1, wherein a keyword is classified into one of predetermined categories and is stored together with its corresponding category in (d).

5.   (Original) The method of claim 1 or 4, wherein a keyword is classified into a person category, an object category, a time category, or a place category.

6.   (Original) The method of claim 1 further comprising (g) storing a predetermined keyword together with its similar keywords so that a semantic unit corresponding to the predetermined keyword and semantic units corresponding to its similar keywords can be searched for together when a search for the semantic unit corresponding to the predetermined keyword or any of its similar keywords is carried out.

7.   (Original) The method of claim 1, wherein the length of each first semantic unit and the length of each second semantic unit are determined by a user who constructs the multimedia database.

8.   (Original) A system for constructing a multimedia database, comprising:

a multimedia database which stores multimedia data; a keyword database which stores keywords necessary for searching for the multimedia data, location information of each first semantic unit of the multimedia data, which is a smallest unit for searching for multimedia data, and location information of each second

semantic unit of the multimedia data, which includes at least one first semantic unit;

an input unit which receives the location information of each first semantic unit, including a start point and an end point, the location information of each second semantic unit, including a start point and an end point, and the keywords; and

a control unit which receives the location information of each first semantic unit, the location information of each second semantic unit, and the keywords from the input unit and stores the keywords in the keyword database together with their corresponding first and second semantic units' location information.

9.   (Original) The system of claim 8, wherein the input unit receives titles of each first semantic unit and each second semantic unit, and the control unit stores the titles in the keyword database together with their corresponding keywords.

10.   (Original) The system of claim 8, wherein the input unit receives predetermined categories into which the keywords are classified, and the controller stores the keywords with their corresponding category.

11.   (Original) The system of claim 8, wherein the keyword database includes a similar keyword database where keywords having similar meanings or indicating the same thing are stored, and when a keyword is input via the input unit, the controller searches the similar keyword database for a keyword that matches the input keyword, and, if there is a search result, stores the input keyword in the keyword database together with its similar keywords obtained from

the similar keyword database so that not only a semantic unit corresponding to the input keyword but also semantic units corresponding to its similar keywords can be searched for when a search for the semantic unit of the input keyword or any of its similar keywords is carried out.

12.   (Original)   A   method   of   constructing   a   multimedia   database, comprising:

(a) setting a length of each first semantic unit of multimedia data, which is a smallest unit for searching for multimedia data according to a user's input;

(b) extracting a keyword from each first semantic unit using a predetermined method;

(c) setting a length of each second semantic unit of the multimedia data including at least one first semantic unit according to the users input; and

(d) storing the extracted keyword with its corresponding first semantic unit and second semantic unit.

13.   (Original) The method of claim 12, wherein (b) comprises:

(b1) extracting voice data from the multimedia data using a predetermined speech recognition technique; and

(b2) extracting a predetermined part of speech from the extracted voice data as a keyword.

14.   (Original) The method of claim 12, wherein (b) further comprises: (b3) receiving a first keyword and first keyword information; and (b4) extracting the first keyword as a keyword of a first semantic unit when the first semantic unit has the same keyword information as the received keyword information.

15.   (Original) The method of claim 14, wherein the keyword information is voice, an image, or text.

16.   (Original) A system for constructing a multimedia database, comprising:

a multimedia database which stores multimedia data;

a keyword database which stores keywords necessary for searching for the multimedia data, location information of each first semantic unit of the multimedia data, which is a smallest unit for searching for multimedia data, and location information of each second semantic unit of the multimedia data, which includes at least one first semantic unit;

a keyword extraction unit which extracts keywords from the multimedia data using a predetermined method; and

a control unit which divides the multimedia data into first semantic units and second semantic units and stores keywords in the keyword database together with their corresponding first and second semantic units' location information.

17.   (Original) The system of claim 14 further comprising an input unit which receives the location information of each first semantic unit, including a start point and an end point, the location information of each second semantic unit, including a start point and an end point, and the keywords.

18.   (Original) The system of claim 16, wherein the keyword extraction unit comprises: a voice extractor which extracts voice data from the multimedia data using a predetermined speech recognition technique; and a part-of-speech extractor

which extracts a predetermined part of speech from the voice data extracted by the voice extractor as a keyword.

19.   (Original) The system of claim 16 further comprising an input unit which receives a first keyword and first keyword information, wherein the keyword extraction unit extracts the first keyword as a keyword of a first semantic unit when the first semantic unit has the same keyword information as the received keyword information.

20.   (Original) A method of providing a multimedia data search service using a system for providing a multimedia data search service, including a multimedia database which stores multimedia data, and a keyword database which stores keywords necessary for searching for the multimedia data, location information of each first semantic unit of the multimedia data, which is a smallest unit for searching for multimedia data, and location information of each second semantic unit of the multimedia data, including at least one first semantic unit, the method comprising:

(a) receiving keywords necessary to search for multimedia data;

(b) allowing a user to select a search unit level from between a first semantic unit and a second semantic unit;

(c) searching for multimedia data of the received search unit level whose keywords match the received keyword; and

(d) outputting information of a searched semantic unit of the received search unit level, linking with the search semantic unit in the multimedia database.

21.   (Original) The method of claim 20, wherein keywords are stored in the

keyword database together with their corresponding first and second semantic units' location information and titles, and in (d), titles of searched semantic units are displayed on a screen.

22.   (Original)   The method of claim 20, wherein in (d), the searched semantic units are displayed on a screen together with their respective keywords.

23.   (Currently amended) A system for providing a multimedia data search service, comprising:

a multimedia database which stores multimedia ~~database~~ data;

a keyword database which stores keywords necessary for searching for the multimedia data, location information of each first semantic unit of the multimedia data, which is a smallest unit for searching for multimedia data, and location information of each second semantic unit of the multimedia data, which includes at least one first semantic unit;

an input unit which receives a keyword and a search unit level a user;

a control unit which searches the keyword database for a keyword that matches the received keyword, provides links between resulting search results and places in the multimedia database where the search results are stored, and outputs some of the search results selected by the user; and

a display unit which displays the searched results obtained by the control unit.

24.   (Original)   A method of constructing a multimedia database, comprising:

(a) receiving location information of each semantic unit of multimedia data, which is a smallest unit for searching for multimedia data;

(b) receiving a keyword for each semantic unit; and

(c) storing keywords together with their corresponding semantic unit' location information.

25.   (Original)   A system for constructing a multimedia database, comprising:

a multimedia database which stores multimedia data;

a keyword database which stores keywords necessary for searching for the multimedia data and location information of each semantic unit, which is a smallest unit for searching for multimedia data;

an input unit which receives the location information of each semantic unit, including a start point and an end point, and the keywords; and

a control unit which receives the location information of each semantic unit from the input unit and the keywords and stores the keywords in the keyword database together with their corresponding semantic units location information.

26.   (Original)   A method of constructing a multimedia database, comprising:

(a) receiving a length of each semantic unit of multimedia data, which is a smallest unit for searching for multimedia data;

(b) extracting a keyword from each semantic unit of the multimedia data; and

(c) storing keywords together with their corresponding semantic unit's location information.

27. (Original) A system for constructing a multimedia database, comprising:

a multimedia database which stores multimedia data; a keyword database which stores keywords necessary for searching for the multimedia data and location information of each semantic unit, which is a smallest unit for searching for multimedia data;

a keyword extraction unit which extracts keywords from the multimedia data using a predetermined method; and

a control unit which divides the multimedia data into semantic units having a predetermined length and stores the extracted keywords together with their corresponding semantic units location information.

28. (Original) A method for providing a multimedia data search service using a search system including a multimedia database which stores multimedia data and a keyword database which stores keywords necessary for searching for the multimedia data and location information of each semantic unit, which is a smallest unit for searching for multimedia data, the method comprising:

(a) inputting a keyword for searching for multimedia data;

(b) searching for a semantic unit of a selected search unit level having the same keyword as the input keyword; and

(c) linking resulting search results to their locations in the multimedia database and presenting the search results to a user.

29. (Original) A system for providing a multimedia data search service, comprising:

a multimedia database which stores multimedia data;

a keyword database which stores keywords necessary for searching for the multimedia data and location information of each semantic unit, which is a smallest unit for searching for multimedia data;

an input unit which receives a keyword from a user;

a control unit which searches the keyword database for a keyword that matches the received keyword and outputs resulting search results with links to their locations in the multimedia database; and

a display unit which displays the searched results obtained by the control unit.

30.   (Original)   A method of constructing a multimedia database, comprising:

(a) a user accessing a system;

(b) allowing the user to designate address information of a multimedia data file desired to be executed by the user;

(c) executing the multimedia data file by accessing a server where the multimedia data file is stored according to the designated address information;

(d) receiving and setting a start time and an end time of each first semantic unit of the multimedia data file, which is a smallest unit for searching for multimedia data while executing the multimedia data file, and receiving representative information of each first semantic unit; and

(e) storing the representative information of each first semantic unit together with the start time and end time of each first semantic unit and the address information of the multimedia data file.

31.   (Currently amended)   A system for constructing a multimedia database, comprising:

an input and output unit which allows a user to access a system, receives address information of a multimedia data file to be executed by the user, a start time and an end time of each first semantic unit of the multimedia data file, and representative information of each first semantic unit and allows the user to transmit data to or receive data from the server where the multimedia data file is stored;

a keyword database which stores the representative information of each first semantic unit with the start time and end time of each first semantic unit and the address information of the multimedia data file; and

a control unit which executes the multimedia data file by accessing the server where the multimedia data file is stored in response to an input from the user using the input and output unit, receives the start time and end time <u>while executing the multimedia file</u> and the representative information of each first semantic unit in response to the input from the user and stores the received information in the keyword database together with the address information of the multimedia data file, and executes a predetermined first semantic unit of the multimedia data file using the address information of the multimedia data file and the start time and end time of the predetermined first semantic unit when a request for searching for and reproducing the predetermined first semantic unit is issued by the user.

32.   (Original)   A method of purchasing multimedia content from a multimedia content owner using a predetermined purchasing system, the method comprising:

(a) informing a user of purchasable multimedia contents and allowing the user to select multimedia content to be purchased;

(b) executing the selected multimedia content using address information of the multimedia content stored in the purchasing system;

(c) allowing the user to set a start time and an end time of each first semantic unit of the multimedia content, which is a smallest unit for purchasing the multimedia content, while executing the multimedia content;

(d) storing the start time and end time of each first semantic unit of the multimedia content with the address information of the multimedia content;

(e) calculating a rate for a first semantic unit according to predetermined standards; and

(f) generating an execution file capable of executing a first semantic unit of the multimedia content purchased by the user using the start time and end time of the first semantic unit and the address information of the multimedia content stored in the purchasing system and providing information to which the execution file is linked.

33.   (Original)   A system for purchasing multimedia content from a multimedia content owner using a predetermined purchasing system, the system comprising:

an input and output unit which allows a user to select multimedia content including a first semantic unit to be purchased and to set a start time and an end time of the first semantic unit;

a keyword database which stores the start time and end time of the first semantic unit together with address information of multimedia contents that can be purchased using the purchasing system;

a controller which executes the selected multimedia content using the address information stored in the keyword database, stores the start time and end time <u>while executing the multimedia file</u> of the first semantic unit in the keyword database in response to an input from the user using the input and output unit, generates an execution file for executing the first semantic unit using the address information of the selected multimedia content and the start time and end time of the first semantic unit, and provides link information to which the execution file is linked; and

a rate calculation unit which calculates a rate for the first semantic unit according to predetermined standards.

34. (Original) A computer-readable recording medium on which a program enabling the method of any of claims 1 through 4, 6, 7, 12 through 15, 20 through 22, 24, 26, 28, and 30 through 32 is recorded.